

## Tomorrow's Energy Today

for Cities and Counties

Local businesses are an important part of your community and can be encouraged to make profitable energy efficiency improvements. This small business owner is shown extending awnings to provide shade against the sun's heat.



# Back to the Basics: Creating a Local Energy Program

Growing numbers of communities are taking control of their resources to manage them as efficiently as possible. The benefits are worthwhile. Here's how to get started in your community.

Editor's Note: Other fact sheets in this series provide case studies describing effective programs and projects created at the local government level. This fact sheet is intended to be an overview of the basic process only and not a comprehensive discussion of energy programs.

Constituents are challenging local officials everywhere to manage all resources—physical, energy, human, and financial—more efficiently. The public demands that taxes be well spent. Many local governments are using public policy and regulatory

authority, community projects, and public relations to avoid unwise spending.

## Creating an Energy Efficiency Program

Outlined on pages 2 and 3 are steps that local governments, or communities at large, can follow to devise an energy efficiency program. In general, an energy efficiency policy is first legislated by the local governing body. Then, an energy program is created to support the policy by developing and executing an action plan. In many cases, the policy and plan will focus solely on how the local government uses energy. Eventually, though, many local energy programs expand to include energy use throughout the whole community.

Some of these steps will depend on how broad your goals are. Do you want to involve only the facilities your city or county controls, or broaden the scope to your whole community? You'll need to base this decision on resources, politics, and time frame. Whatever scope you choose, the process is similar. This process can be adapted to your local conditions.

Step 1: Determine how much you spend on energy.

Tracking your energy costs is a smart first step. How extensively you track data will depend on how far reaching your city's or county's program will be. According to Lera Riley, Deputy Public Works Director for the city of Phoenix, "Energy costs seldom appear as a single line item in a local budget, which makes them difficult to monitor and control." If energy were treated as a single expense, it would be among the largest budget items after payroll for local governments.

In some local governments, energy costs are totaled for each department. In others, energy costs are listed as a series of unrelated expenses for each department. If the latter type of accounting is used, managers and department heads may not even know how much they spend on energy. In that event, the first step is to start monitoring consumption and costs. (You may need to develop and implement a system for tracking energy consumption and costs.)

For still other local governments, energy costs are a budgetary line item. Government officials who have tried this approach have found that looking at energy costs as a line item often increases awareness of energy efficiency.

You can sometimes save a surprising amount of money just by checking your utility bills. For example, Phoenix monitors all municipal utility bills. The city checks individual bills for correct charges and ensures that the correct utility rate is applied. In a 2-year period, the city saved more than \$100,000 in utility bills because of this monitoring.

Step 2: Designate or create a lead office.

Leadership must come from one office, whether it's the planning department, city or county manager's office, public works, environmental services, or a special energy office. This doesn't mean, however, that the lead office is the only department involved. All city or county departments need to be involved in planning and supporting the process. Forming a staff committee is a good idea, too, as it helps ensure buy-in.

Successful policies also clearly give the lead office the authority for implementation. For example, the Portland Energy Office in Oregon manages the city's day-to-day implementation of its energy efficiency policy. "The policy has given us credibility, a way of merging energy with other issues," says Director Susan Anderson. "That's key, because people may not care about energy. But they do care about keeping their houses warm, getting to work, traffic congestion, affordable housing, air and water pollution, and economic development for business. Energy ties all of those individual issues together."

Step 3: Link energy programs with community goals.

A critical component of this step is to identify major community issues and goals related to energy efficiency. The idea is to piggyback energy issues with existing community goals. Your community may already have a general plan that outlines goals concerning land use, transportation, housing, energy, and the environment. You can often link these goals through an energy efficiency program.

For example, lower energy bills can make housing more affordable. In addition, energy efficiency programs create local jobs and benefit the local economy through the purchase of contractor services and materials.

You may not need to look far to discover your major community issues and goals. Often, research will already have been performed on these issues by the city council, a chamber of commerce, citizen groups, or community publications that highlight the issues. A good way to assess community issues is to invite leaders in business, education, and neighborhood groups to give their input. Work with your local media—they can arouse public support.

Step 4: Build grassroots community support.

To carry out your goals and objectives, you'll need community involvement. Building support establishes allies and a clear picture of the financial resources you need for a project, compared with what you have available. You can build support through task forces, meetings with citizens, informal networking, and meetings with business leaders, utilities, and interest groups. If you can demonstrate why the community should care about energy, your efforts will be more successful.

Leadership, credibility, and visibility can be attained by connecting with a known corporate or community citizen. "One of the most difficult but important tasks," says Anderson, "is to enlist the aid of 'champions,' people respected in the business community and public arena who will endorse and help to sell your policy." A champion acts as an advocate. Your champion can be an individual or an entire office.

#### Financial Resources

In today's economy, energy improvements are an investment that can help cities and counties increase productivity and profits. Wondering how you can finance such projects in your community?

There are several different financial techniques—without much risk—that are working for local governments today. Some are conventional tools, such as matching grants and revolving loan funds, modified to work for energy efficiency projects. Others, such as performance contracts and public-private partnering, are more innovative.

Performance contracting allows local governments to try projects without making any initial capital investment. It's a growing trend because everyone comes out ahead—business, government, and the taxpayer. Because your local government may represent a substantial and attractive sales potential, local businesses may be willing to engage in innovative financing arrangements.

Under such an arrangement, a third party, usually an energy service company, provides a city or county with a service package that typically includes the financing, installation, and maintenance of energy-saving capital improvements. The customer uses resulting energy savings to pay for the improvements.

Performance contracts are often structured as a lease, but with a guarantee that payments will not exceed energy savings. This minimizes financial risk.

Another new, creative form of financing will soon be in place in a unique partnership between Public Technology, Inc., and Entergy Systems and Service, Inc. (ESASI). The program will offer energy services specifically designed for local governments. The program aims to provide local governments with the capital, technology, installation, and maintenance they need to build and sustain energy-efficient systems. For more information about this program, contact Linda Keenan of Public Technology, Inc., at (202) 626-2457 or e-mail: keenan@pti.nw.dc.us.

Also, don't overlook other local governments, city or county departments, or regional agencies as potential partners or funders. Help may be available through state and federal government, utilities, local lending institutions, equipment manufacturers, private foundations, or a local corporation looking for a good project to support. Matching grants are available from a variety of sources. For more information on grants, loans, and other financial options, contact your state energy office.

Step 5: Don't reinvent the wheel.

Find out what's working in other communities (see *For More Information* as a starting point). Another resource is your state energy office.

Step 6: Prioritize actions and develop a draft plan.

With community members and leaders, create a list of options. Next, determine each option's costs, benefits, environmental effects, economic and technological potential, funding resources, and political acceptability.

Choose the tasks that will produce the greatest benefit; then prioritize them according to how well they apply to your community.

Some options will be easier to sort than others. Assess the relative impacts of the difficult options by ranking them on a scale, say from 1 to 5. Once you've decided on your list, you're ready to develop a draft plan. You might try having your task force take a first crack at drafting a plan, and then hold public meetings. It's important for the community to help create and review the draft plan, as this builds public support. Once you have a high level of community support, you can take a formal plan to the city council or board of commissioners for adoption.

Step 7: Implement the plan.

It's important to start with realistic goals, but it's also essential to avoid short-term thinking. Concentrate on projects that will produce the greatest impact. You can look for grants or contracts from utilities, energy or health and social service departments, private foundations, or local corporations. See *Financial Resources* for a description of other financing options.

Step 8: Evaluate success and update the plan.

Your policy should be a living document, with short-term plans being reevaluated and updated every 2 or 3 years, and long-term plans every 5 years. An evaluation compares your objectives with your outcomes. And that means tracking and documenting savings. When you evaluate, look for a specific, measurable result, such as reduced vehicle miles traveled or reduced air or water emissions. Tracking ensures that you'll have a mechanism to continually report benefits and fine-tune your program.

Step 9: Publicize the benefits.

Fostering a clear appreciation of the new policy's benefits is critical. That entails marketing, public relations, and media events. These build trust and credibility, too. Let taxpayers know you've provided more services for fewer dollars.

Your city or county can save money and ensure the availability of resources for years to come. By your taking the initiative, your entire community can benefit from forward thinking. You can generate community pride, enthusiasm, and a feeling of empowerment while building a more sustainable future.

#### For More Information

U.S. Department of Energy Susan Cadenhead Municipal Energy Management Program U.S. Department of Energy, EE-531 1000 Independence Avenue, SW Washington, DC 20585-0121 (202) 586-9120

Urban Consortium Energy Task Force (UCETF) Public Technology, Inc. 1301 Pennsylvania Avenue, NW Washington, DC 20004 (202) 626-2400 Sustainable Energy: A Local Government Planning Guide for a Sustainable Future

The Union of Concerned Scientists 1616 P Street, NW Washington, DC 20036 (202) 332-0900 Renewables Are Ready: People Creating Renewable Energy Solutions

National Association of Energy Service Companies 1200 G Street, NW, Suite 760 Washington, DC 20005 (202) 347-0419

**Energy Efficiency and Renewable Energy Clearinghouse** P.O. Box 3048 Merrifield, VA 22116 (800) 363-3732

EREC, funded by the U.S. Department of Energy, provides information on renewable energy and energy efficiency technologies.

Rocky Mountain Institute 1739 Šnowmass Creek Road Snowmass, CO 81654 (970) 927-3851 The Community Energy Workbook: A Guide to Building a Sustainable Economy

Cities and Counties Project U.S. Department of Energy c/o National Renewable Energy Laboratory 1617 Cole Boulevard Golden, CO 80401 (303) 275-4363

e-mail: evanss@tcplink.nrel.gov Cities and Counties Resource Guide: Meeting Today's Energy Needs Without Sacrificing Tomorrow's Resources

The Cities and Counties Project, an outreach effort to local governments, is funded by DOE and managed by NREL. This project publishes a series of case studies on various sustainability projects at the local government level.

#### Cities and Counties on the Internet

Interested in more energy-saving ideas for your community? This fact sheet and others are available on-line. Go to the Energy Efficiency and Renewable Energy Network at: http://www.eren.doe.gov, find Alphabetical Listing of All Sites, and click on Energy Solutions for Cities and Counties.

### DOE Regional Support Offices

The DOE Office of Energy Efficiency and Renewable Energy reaches out to the states and private industry through a network of regional support offices. Contact your DOE regional support office for information on energy efficiency and renewable energy technologies.

Atlanta DOE Support Office 730 Peachtree Street, NE, Suite 876 Atlanta, GA 30308 (404) 347-2837 (Serves: AL, AR, FL, GA, KY, MS, NC, PR, SC, TN; Territory, VI)

**Boston DOE Support Office** One Congress Street, 11th Floor Boston, MA 02114 (617) 565-9700 (Serves: CT, MA, ME, NH, NY, RI, VT)

Chicago DOE Support Office One South Wacker Drive, Suite 2380 Chicago, IL 60606 (312) 353-6749 (Serves: IA, IL, IN, MI, MN, MO, OH, WI) Denver DOE Support Office 2801 Youngfield Street, Suite 380 Golden, CÖ 80401 (303) 231-5750 (Serves: CO, KS, LA, MT, ND, NE, NM, OK, SD, TX, UT, WY)

Philadelphia DOE Support Office 1880 JFK Boulevard, Suite 501 Philadelphia, PA 19103  $(215)\ 65\hat{6}-6950$ (Serves: DC, DE, MD, NJ, PA, VA, WV)

Seattle DOE Support Office 800 Fifth Avenue, Suite 3950 Seattle, WA 98104 (206) 553-1004 (Serves: AK, AZ, CA, HI, ID, NV, OR,



This document was produced for the U.S. Department of Energy (DOE) by the National Renewable Energy Laboratory, a DOE national laboratory. The document was produced by the Technical Information Program, under the DOE Office of Energy Efficiency and Renewable Energy.

DOE/GO-10095-239 DE96000475 December 1995



Printed with a renewable-source ink on paper containing at least 50% wastepaper, including 20% postconsumer waste